



STANDARD STRAIGHT BAR

BAR SIZE	* LOCATION CATEGORY		
	A	B	C
#4	1'-5"	1'-0"	1'-0"
#5	1'-9"	1'-3"	1'-0"
#6	2'-2"	1'-6"	1'-3"
#7	2'-7"	1'-10"	1'-6"
#8	3'-4"	2'-5"	1'-11"
#9	4'-3"	3'-0"	2'-5"
#10	5'-4"	3'-10"	3'-1"
#11	6'-7"	4'-8"	3'-9"

* LOCATION CATEGORY:

- A- Bars in horizontal layers in top of pour with 12" or more of concrete below them such as in: footings, pier caps, etc.
- B- All bars not in Category A spaced less than 6" apart.
- C- All bars not in Category A spaced 6" or more apart.

Note:

1. When development length is not specified on the Plans, the above dimensions shall be used.
2. These development lengths do not apply when bar is in lightweight concrete or any other strength of concrete.
3. These development lengths only apply where the General Notes indicate "Reinforcing Steel Design, $f_s = 24,000$ p.s.i."
4. If depth of member does not allow bar development length indicated in Categories A, B, and C; then hook shall be added to all bars not conforming, as per D, E, and F per Std. No. M(6.10)-86-180.

APPROVAL	
<i>L.S. Friedman</i> DIRECTOR	
OFFICE OF BRIDGE DEVEL.	
DATE: 2/2/90	
REVISIONS	
SHA	FHWA
1-22-01	
9-20-05	
12-4-07	

FHWA APPROVAL
DATE:

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF BRIDGE DEVELOPMENT
DEVELOPMENT LENGTH DIMENSIONS FOR
GRADE 60 REINFORCING STEEL
IN MIX NO.6 (4500 P.S.I.) CONCRETE
NON-EPOXY COATED REINFORCING

STANDARD NO. M(6.16)-90-216

SHEET 1 OF 3

MISCELLANEOUS